1. (currently amended) A method of sending data from a transmit site to a receive site, the method comprising: dividing a transmit data stream having a first bit rate into multiple data streams with each of the multiple data streams having a bit rate which is lower than the first bit rate; transmitting each of the multiple data streams over a cable network comprising a plurality of RF channels, wherein at least one of the RF channels has connections to serves a plurality of users and the connections to the plurality of users are between the transmit site and the receive site; and recombining the multiple data streams at the receive site to provide a receive data stream having a bit rate equal to the first bit rate.

2. (previously presented) The method of claim 1 wherein data is sent from the transmit site to a plurality of receive sites.

3. (previously presented) The method of claim 1, wherein data is sent from a plurality of transmit sites to a receive site.

4. (previously presented) The method of claim 1 wherein each of the multiple data streams are packetized.

5. (previously presented) The method of claim 4 further comprising: establishing a plurality of virtual links over each RF channel between send and receive sites; and distributing packets over the plurality of virtual links in a controlled fashion.

2

6. (previously presented) The method of claim 5 wherein the controlled fashion is via load balancing.

7. (previously presented) The method of claim 5 wherein the controlled fashion takes into account scheduling policies.

8. (previously presented) The method of claim 4 further comprising: maintaining a separate queue for each of the plurality of RF channels; placing each packet into one of the separate queues; and transmitting the packet on each of the plurality of RF channels in a predetermined order.

9. (previously presented) The method of claim 4 further comprising: maintaining a separate queue for each of the plurality of RF channels; placing each packet received from an RF channel into one of the separate queues; and recombining each of the packets received from the RF channel into a single data stream by taking packets from the queues in a predetermined order.

10. (previously presented) The method of claim 1 wherein the received data stream obtained by recombining the multiple data streams is identical to the transmit data stream.

11. (previously presented) The method of claim 1 wherein each of the plurality of RF channels correspond to RF channels carried over an RF cable and wherein

each of the RF channels is provided having a different carrier frequency.

12. (previously presented) The method of claim 1 wherein at least one of the channels which carries one of the multiple data streams also carries data used by at least one other user, wherein the original user and the new user receive data over a different number of RF channels.

13. (previously presented) The method of claim 5 wherein the virtual links are established via a tunneling process.

14. (previously presented) The method of claim 13 wherein the tunneling process is an IP tunneling process.

15. (previously presented) The method of claim 5 wherein the virtual links are established via a MAC-layer process.

16. (canceled)

17. (previously presented) The method of claim 1 wherein the channels are carried over a CATV plant.

18. (previously presented) The method of claim 1 wherein the transmit and receive data streams are carried over an optical fiber.

19. (previously presented) The method of claim 1 wherein each of the plurality of RF channels are adjacent in frequency.

20. (previously presented) The method of claim 1 wherein each of the plurality of RF channels are not adjacent in frequency.

21. (previously presented) The method of claim 1 wherein each of the plurality of RF channels are provided as DOCSIS channels.

22. (previously presented) The method of claim 21 wherein each of the plurality of DOCSIS channels are compatible for use with legacy DOCSIS users.

23. (previously presented) The method of claim 1 wherein at least one of the channels which carries one of the multiple data streams also carries data used by at least one other user, wherein the at least one other user only uses that channel.

24. (previously presented) The method of claim 1 wherein at least one of the channels which carries one of the multiple data streams also carries data used by at least one other user, wherein the at least one other user uses at least one channel not used by the original user.

25. (previously presented) The method of claim 1 where the number of RF

channels used can change dynamically.

26. (previously presented) The method of claim 4 wherein the packets correspond to IP packets.

27. (previously presented) The method of claim 4 wherein the packets correspond to MAC layer packets.

28. (previously presented) The method of claim 4 wherein the packets contain one or more encapsulated IP packets.

29. (previously presented) The method of claim 9 wherein the recombination is done without packet identifying information.

30. (previously presented) The method of claim 14 wherein the transmit site utilizes a TCP gateway.

31. (currently amended) A method of sending data comprising: dividing a transmit data stream having a first bit rate into multiple data streams with each of the multiple data streams having a bit rate which is lower than the first bit rate; and transmitting each of the multiple data streams over a cable network comprising a plurality of RF channels, wherein at least one of the RF channels serves a plurality of users.

32. (previously presented) The method of claim 31 wherein transmitting each of the multiple data streams over a plurality of RF channels includes transmitting each of the multiple data streams over a plurality of RF channels, wherein each of the RF channels is provided having a different carrier frequency.

33. (canceled)